

**Amendments to the Claims:**

This listing of claims will replace all prior version, and listings, of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer to the claimed and/or disclosed subject matter, and the applicant and/or assignee reserves the right to claim this subject matter and/or other disclosed subject matter in a continuing application.

**Listing of the claims:**

1. (Currently Amended) A control device for controlling a scanning speed of a scanner, comprising:

a decision device coupled to an input device, ~~said decision device for~~ capable of receiving input image data, ~~counting and recording data access volume;~~ and outputting ~~count data and~~ decision data based at least in part on count data and data access volume;

a driving device coupled to the decision device ~~for~~ capable of receiving the decision data and capable of adjusting the scanning speed according to the decision data; and

~~an input/output interface coupled to the decision device for receiving the output image data.~~

2. (Currently Amended) The control device of ~~of~~ [[in]] claim 1, wherein the decision device further includes:

an image buffer coupled to an output terminal of the input device ~~for~~ capable of receiving the input image data, temporarily storing the input image data and outputting output image data to an input/output interface coupled to the decision device;

an up-down counter coupled to an input terminal of the image buffer and an output terminal of the image buffer ~~for~~ capable of counting and recording data access volume inside the image buffer and outputting count data; and

a comparator coupled to the up-down counter ~~for~~ capable of receiving the count data, deciding whether to increase or decrease the scanning speed according to the count data and outputting the decision data.

3. (Currently Amended) The control device of claim 2, wherein the up-down counter ~~enables an~~ is capable of up-counting ~~function~~ to increase a value inside the counter by one ~~when~~ if the up-down counter detects transfer of input image data into the image buffer, and further wherein the up-down counter is capable of ~~enables a~~ down-counting ~~function~~ to decrease the value inside the counter by one ~~when~~ if the counter detects transfer of output image data to the input/output interface.

4. (Currently Amended) The control device of claim 2, wherein the up-down counter ~~enables a~~ is capable of down-counting ~~function~~ to decrease a value inside the counter by one ~~when~~ if the up-down counter detects a transfer of input image data into the image buffer, and further wherein the up-down counter ~~enables an~~ is capable of up-counting ~~function~~ to increase the value inside the counter by one ~~when~~ if the counter detects a transfer of output image data to the input/output interface.

5. (Currently Amended) The control device of claim 1, wherein the input device further includes:

an optical sensor ~~for~~ capable of receiving an external signal and outputting an analogue signal;

an analogue/digital converter coupled to the optical sensor ~~for~~ capable of receiving the analogue signal and converting the analogue signal into a digital signal, and then outputting the digital signal; and

an image processor coupled to the analogue/digital converter and the decision device ~~for~~ capable of receiving the digital signal and converting the digital signal into the input image data, and then outputting the input image data to the decision device.

6. (Currently Amended) The control device of claim 1, wherein the driving device further includes: an electric motor; and a motor controller coupled to the electric motor and the decision device ~~for~~ capable of receiving the decision data and controlling the running speed of the electric motor according to the decision data.

7. (Original) A method for controlling a scanning speed of a scanner, comprising:  
providing count data;  
providing a largest data access volume; and  
determining the scanning speed of a scanner according to a ratio between the  
count data and the largest data access volume.

8. (Currently Amended) The control method of claim 7, wherein the scanner  
scans at approximately full speed ~~when~~ if the count data is greater than approximately 3/4  
of the largest data access volume.

9. (Currently Amended) The control method of claim 7, wherein the scanner  
scans at approximately 3/4 of full speed ~~when~~ if the count data is smaller than  
approximately 3/4 of the largest data access volume but greater than approximately 1/2 of  
the largest data access volume.

10. (Currently Amended) The control method of claim 7, wherein the scanner  
scans at approximately 1/2 of full speed ~~when~~ if the count data is smaller than  
approximately 3/4 of the largest data access volume but greater than approximately 1/4 of  
the largest data access volume.

11. (Currently Amended) The control method of claim 7, wherein the scanner  
scans at approximately 1/4 of full speed ~~when~~ if the count data is smaller than  
approximately 1/4 of the largest data access volume.

12. (New) An apparatus, comprising:  
means for providing count data;  
means for providing a largest data access volume; and  
means for determining the scanning speed of a scanner according to a ratio  
between the count data and the largest data access volume.

13. (New) The apparatus of claim 12, wherein said means for determining the scanning speed further comprises determining the scanning speed at approximately full speed if the count data is greater than approximately  $3/4$  of the largest data access volume.

14. (New) The apparatus of claim 12, wherein said means for determining the scanning speed further comprises determining the scanning speed as approximately  $3/4$  of full speed if the count data is smaller than approximately  $3/4$  of the largest data access volume but greater than approximately  $1/2$  of the largest data access volume.

15. (New) The apparatus of claim 12, wherein said means for determining the scanning speed further comprises determining the scanning speed as approximately  $1/2$  of full speed if the count data is smaller than approximately  $3/4$  of the largest data access volume but greater than approximately  $1/4$  of the largest data access volume.

16. (New) The apparatus of claim 12, wherein said means for determining the scanning speed further comprises determining the scanning speed as approximately  $1/4$  of full speed if the count data is smaller than approximately  $1/4$  of the largest data access volume.